

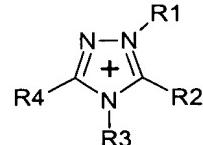
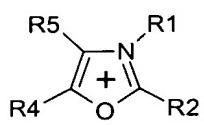
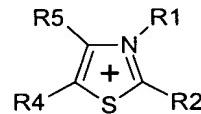
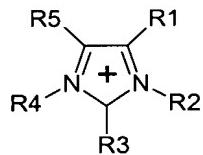
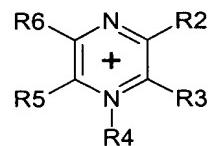
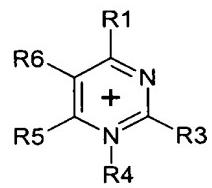
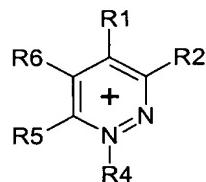
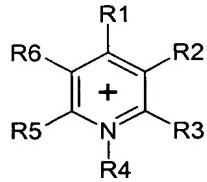
LISTING OF CLAIMS

1. (Previously Amended) An ionic liquid of the general formula



wherein:

K^+ is a cation selected from:



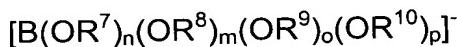
wherein

R¹ to R⁶ are identical or different and are each individually

- H,
- a halogen,

- an alkyl radical (C_1 to C_8), which is unsubstituted, or which is partially or fully substituted by F, Cl, N($C_nF_{(2n+1-x)}H_x$)₂, O($C_nF_{(2n+1-x)}H_x$), SO₂($C_nF_{(2n+1-x)}H_x$) or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$
- a phenyl radical which is unsubstituted or which is partially or fully substituted by F, Cl, N($C_nF_{(2n+1-x)}H_x$)₂, O($C_nF_{(2n+1-x)}H_x$), SO₂($C_nF_{(2n+1-x)}H_x$) or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$, or
- one or more pairs of adjacent R¹ to R⁶ can also be an alkylene or alkenylene radical and having up to 8 C atoms, wherein the radical is unsubstituted or partially or fully substituted by halogen, N($C_nF_{(2n+1-x)}H_x$)₂, O($C_nF_{(2n+1-x)}H_x$), SO₂($C_nF_{(2n+1-x)}H_x$) or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$

wherein A⁻ is an anion selected from



wherein

$0 \leq n, m, o, p \leq 4$, and $m+n+o+p=4$, and

R⁷ to R¹⁰ are different or identical and are each, individually:

an aromatic ring selected from a phenyl, anthracenyl and phenanthrenyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen,

an aromatic heterocyclic ring selected from a pyridyl, pyrazyl and pyrimidyl ring, which is unsubstituted, or which is mono-substituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen,

or

an alkyl radical (C₁ to C₈), which is unsubstituted, or which is partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x), or C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13,

and wherein one or more pairs of R⁷ to R¹⁰ can also form

an aromatic ring selected from a anthracenylene and phenanthrenylene ring, which is unsubstituted or an aromatic ring selected from a phenylene, naphthylene, anthracenylene and phenanthrenylene ring which is monosubstituted or polysubstituted by C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13, or halogen,

an aromatic heterocyclic ring selected from a pyridylene, pyrazylene and pyrimidylene ring, which is unsubstituted, or which is mono-substituted or polysubstituted by C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13, or halogen,

or

an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or which is partially or fully substituted by halogen, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x wherein 1<n<6 and 0<x≤13

or OR⁷ to OR¹⁰, individually or together,

are an aromatic having 6 to 14 C atoms and which is a dicarboxyl, oxysulfonyl or oxycarbonyl radical, which is unsubstituted, or which is partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13

or

are aliphatic having 1 to 6 C atoms and which is a carboxyl, dicarboxyl, oxysulfonyl or oxycarbonyl radical, which is

unsubstituted, or which is partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x, wherein 1< n < 6 and 0 < x ≤ 13.

2. (**original claim**) An ionic liquid according to claim 1, wherein at least one of R¹ to R⁶ of the cation is an alkyl radical which is unsubstituted or partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x wherein 1< n < 6 and 0 < x ≤ 13.

3. (**original claim**) An ionic liquid according to claim 1, wherein at least one of R¹ to R⁶ of the cation is a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x wherein 1< n < 6 and 0 < x ≤ 13.

4. (**original claim**) An ionic liquid according to claim 1, wherein at least a pair of R¹ to R⁶ of the cation is an alkylene or alkenylene radical which is unsubstituted or partially or fully substituted by halogen, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x wherein 1< n < 6 and 0 < x ≤ 13.

5. (**original claim**) An ionic liquid according to claim 1, wherein at least one of R⁷ to R¹⁰ of the anion is an alkyl radical which is unsubstituted or partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x), or C_nF_(2n+1-x)H_x, wherein 1< n < 6 and 0 < x ≤ 13.

6. (**original claim**) An ionic liquid according to claim 1, wherein at least one pair of R⁷ to R¹⁰ of the anion is an alkylene or alkenylene radical which is unsubstituted or partially or fully substituted by a halogen,

$N(C_nF_{(2n+1-x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ wherein $1 < n < 6$ and $0 < x \leq 13$.

7. (Previously Amended) An ionic liquid according to claim 1, wherein at least one of R^7 to R^{10} of the anion is an aromatic ring selected from a phenyl, anthracenyl and phenanthrenyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or by a halogen.

8. (Previously Amended) An ionic liquid according to claim 1, wherein at least one of R^7 to R^{10} of the anion is an aromatic heterocyclic ring selected from a pyridyl, pyrazyl and pyrimidyl ring, which is unsubstituted, or which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or (F, Cl or Br).

9. (Previously Amended) An ionic liquid according to claim 1, wherein at least one pair of R^7 to R^{10} of the anion is an aromatic ring selected from an anthracenylene and phenanthrenylene ring, which is unsubstituted or a phenylene, naphthylene, anthracenylene and phenanthrenylene ring, which is monosubstituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or halogen.

10. (original claim) An ionic liquid according to claim 1, wherein at least one pair of R^7 to R^{10} of the anion is an aromatic heterocyclic ring selected from a pyridylene, pyrazylene and pyrimidylene ring, which is unsubstituted, or which is mono-substituted or polysubstituted by $C_nF_{(2n+1-x)}H_x$, wherein $1 < n < 6$ and $0 < x \leq 13$, or by halogen.

11. (withdrawn) An electrochemical cell comprising a cathode, an anode, a separator, and the ionic liquid of claim 1.
12. (withdrawn) A supercapacitor comprised of at least a pair of electrodes, a separator, and the ionic liquid of claim 1.
13. (withdrawn) An electrolyte composition comprising an ionic liquid of claim 1 and an aprotic solvent.
14. (withdrawn) An electrolyte composition comprising an ionic liquid of claim 1 and a conductive salt.
15. (original claim) A method for making an ionic liquid according to claim 1, comprising reacting a chloride salt of the formula K^+Cl^- with a lithium salt of the formula Li^+A^- within an aprotic solvent.
16. (Currently Amended) A compound An ionic liquid according to claim 1 selected from :
- 1-ethyl-3-methylimidazolium bis [1,2-benzenediolato-O,O'] borate,
1-ethyl-3-methylimidazolium bis[oxalato]borate, and
1-ethyl-3-methylimidazolium bis[salicylato]borate.
17. (Previously Amended) A compound according to claim 16, wherein said compound is:

1-ethyl-3-methylimidazolium bis [1,2-benzenediolato-O,O'] borate.

18. (**previously presented**) A compound according to claim 1, wherein A⁻ is

bis[oxalato]borate,

or

bis[salicylato]borate.

19. (**new**) A compound according to claim 1, wherein A⁻ is

bis[salicylato]borate.

20. (**new**) A compound according to claim 16, wherein said compound is:

1-ethyl-3-methylimidazolium bis[oxalato]borate.

21. (**new**) A compound according to claim 1, wherein OR⁷ to OR¹⁰, individually or together,

are aliphatic having 1 to 6 C atoms and which is a carboxyl, dicarboxyl, oxysulfonyl or oxycarbonyl radical, which is unsubstituted, or which is partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x, wherein 1<n<6 and 0<x≤13.